



June 24, 2016

Water & Sewer Utility
City of Wichita
455 North Main Street, 8th Floor
Wichita, Kansas 67202-1677

Re: Consulting Engineer's Report

Ladies and Gentlemen:

In accordance with our agreement with the City of Wichita, Kansas (City), Burns & McDonnell submits this Consulting Engineer's Report (Report). This Report has been prepared in connection with the issuance of \$26,090,000¹ Water and Sewer Utility Revenue Bonds, Series 2016A. Of this amount, approximately \$12,545,000 is for water projects and \$13,545,000 is for sewer projects. Hereinafter in this Report the bond issue is referred to as "the Bonds." The purpose of this Report is to present our findings concerning debt service coverage requirements for the issuance of additional bonds as described in the Bond Ordinance.

In conducting our studies, Burns & McDonnell has made such investigations and reviews of the facilities, books, records, and capital improvement programs of the Wichita Water and Sewer System (the Utility) and other investigations, as we deemed necessary. Revenues and revenue requirements for the Utility are presented in this Report for the historical three-year period ending December 31, 2014 and a projected five-year period ending December 31, 2019. This Report concludes with a summary of our major opinions regarding the Utility. In preparing our summary of historical information and forecasts and in forming an opinion of the debt service coverage summarized in this Report, Burns & McDonnell has made certain assumptions with respect to conditions, events, and circumstances which may occur in the future. Such assumptions and methodologies are summarized in this letter and are reasonable and appropriate for the purpose for which they are used. While Burns & McDonnell believes the assumptions are reasonable and the methodology valid, actual results may differ materially from those forecasted, as influenced by the conditions, events, and circumstances which actually occur.

The Utility staff provided historical data presented in this Report and the Comprehensive Annual Financial Reports prepared for the City. Burns & McDonnell reviewed and discussed this data with the Utility. Burns & McDonnell has prepared summary tables presenting the overall debt service coverage for the combined water and sewer systems which are found later in this Report.

¹ Preliminary, subject to change.



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SYSTEM DESCRIPTION

The City currently owns and operates the water and sewer systems. The Utility serves customers within the City limits and in outlying areas. It supplies and distributes high quality potable water, and collects and treats wastewater for the City. Services provided include pumping and purifying water, maintaining the water distribution and wastewater collection systems, treating wastewater, managing facilities, and planning for future needs.

UTILITY ORGANIZATION

The water and sewer utility systems operate independently of one another, with separate funding accounts. As a general statement, Burns & McDonnell found the Utility to be well-run, to have developed resources for future requirements, and to operate in a businesslike manner. The City conducted a comprehensive financial plan, cost of service, and rate study in 2015, which forms the basis for the existing rates. The model has been periodically updated and maintained, with further analysis underway regarding FY 2017 rates. The City conducts long term financial planning as part of its annual budgeting process, and has demonstrated a willingness to implement rate adjustments necessary to meet its financial obligations.

The Utility's organizational structure is sound and personnel are well prepared to keep the water and sewer systems operating in a reliable manner. Utility personnel are a part of the City Public Works & Utilities (PW&U) Department. The current Utility organization is depicted in Figure 1 on the following page. Within the current organizational structure, divisions that have direct involvement with Utility operations and support functions include Sewer Maintenance, Water Distribution, Water Systems Planning, Sewage Treatment, Water Production, and PW&U Strategic Services.

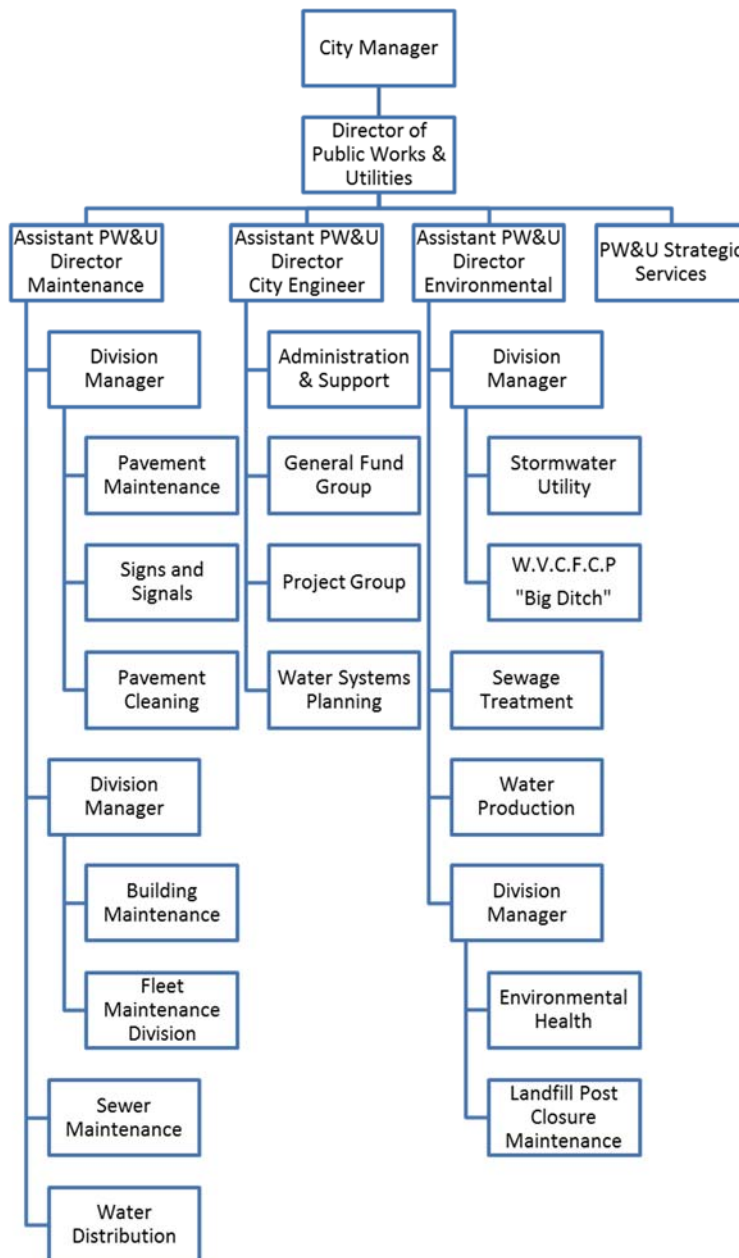
The Sewer Maintenance Division operates and maintains a sanitary sewer gravity collection system of over 2,000 miles that transports wastewater from customers to treatment plants. The Water Distribution Division operates and maintains a pipe network of over 2,400 miles that transports potable water from the Water Treatment Plant to customers in an approximate 200 square mile area, both inside and outside the City.

The Water Systems Planning Division provides engineering expertise for the benefit of both the water and sewer utility systems. The Sewage Treatment Division treats approximately 40 million gallons per day of sewage at its four National Pollutant Discharge Elimination System permitted facilities.

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Figure 1

WATER AND SEWER UTILITY ORGANIZATIONAL STRUCTURE
City of Wichita, Kansas





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The Water Production Division monitors the raw water supply in the Equus Beds Wellfield, Cheney Reservoir, and the local wellfields. The Water Production Division also operates and maintains the delivery system that transports the raw water to the main water treatment plant. Additionally, the Water Production Division operates and maintains the main water treatment plant, with a treatment capacity of 160 million gallons per day, which cleans, purifies and softens the water to meet or exceed all federal drinking water standards.

The Water Production Division also operates and maintains the Phase II ASR Surface Water Treatment Plant which is capable of collecting 30 MGD of raw water from the Little Arkansas River, treating it to drinking water standards, and injecting it into the Equus Beds Wellfield for future raw water supply. The Water Production Division is also responsible for pumping finished water into the system and maintaining adequate water pressure throughout the service area, using several pump stations as well as ground and elevated storage reservoirs.

The PW&U Strategic Services Division provides direction and service for the entire utility and public works department. It also oversees the financial activity of the Utility as well as customer billing, revenue tracking, bond issuance, and debt coverage ratio projections.

SYSTEM CONDITION

Water Utility

Burns & McDonnell found the Water Utility to be in generally good condition. The design and operation of the system is acceptable and conforms to general accepted engineering standards. A strategic plan to meet future water demands and regulatory requirements has been prepared for the system. A ten year capital improvement plan has been developed and is periodically revised, updated, and prioritized. Major projects in the plan include replacement of existing water mains; construction of new water mains for future development; a continuing program to replace water meters with automated meter reading technology; chemical feed and clarifier upgrades to the Main Water Treatment Plant; and local wellfield expansion.

Sewer Utility

In general Burns & McDonnell considers the sewer system to be in good condition and to be performing as designed. In 2012 the sewer system experienced a wastewater spill that resulted in a Consent Agreement (CA) with the Kansas Department of Health & Environment (KDHE). In accordance with that CA, the Utility is proceeding with certain projects to reduce the risk of similar events occurring in the future. The design and operation of the system is acceptable and conforms to general accepted engineering standards. A strategic plan to meet future wastewater demands and regulatory requirements has been prepared for the system. A ten year capital improvement plan has been developed and is periodically revised, updated, and prioritized. Major projects included in the plan over the next few years include rehabilitation of the City's



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primary force main; future nutrient removal at Plant 2; headworks and aeration improvements to Plant 3, capacity expansion of Plant 4, a program to rehabilitate or replace existing sewer mains; and construction of new sewer mains to serve new development.

The utility is currently performing an update to both their water supply master plan and sanitary sewer master plan. Both plans are expected to be complete in 2016.

PURPOSE OF THE BONDS

The Bonds are being issued for the purpose of covering costs associated with a number of capital projects that are partially or fully complete. These projects are proceeding on schedule and no problems are currently anticipated that would keep the Utility from completing the desired work. Projects include water main and sanitary sewer repair and replacements, including evaluation of a sewer force main and rehabilitation of the City's primary raw water main.

FINANCIAL FEASIBILITY FOR THE BONDS

The financial data used in the analysis presented herein was obtained from the financial records of the Utility. The 2012, 2013 and 2014 financial reports have been audited by Allen, Gibbs & Houlik, L.C., Certified Public Accountants and are maintained in conformity with generally accepted accounting principles for governmentally owned water utilities.

SALES REVENUES

Sales revenue of the Utility is derived primarily from water sales and treatment of sewage flows. Annual water customers, sales and sales revenues for the historical period 2012 through 2014 are presented in Table 1. The number of water customers has remained relatively consistent. Water sales were influenced by relatively hot and dry conditions in 2012 and wet weather conditions in 2013 and 2014. Total water sales revenue was \$80.3 million in 2012, \$63.4 million in 2013, and \$73.8 million in 2014. Water revenues reflect rate increases which became effective on January 1 of 2012, 2013 and 2014.

Annual sewer customers and sales revenues for the historical period 2012 through 2014 are presented in Table 2. Total sewer sales revenue was \$45.1 million in 2012, \$48.9 million in 2013, and \$49.8 million in 2014. Sewer customers decreased slightly from 2012 to 2013, then increased in 2014. The sewer revenues reflect rate increases which became effective on January 1 of 2012, 2013 and 2014. An additional rate increase was implemented on January 1, 2015 and January 1, 2016 for both water and sewer utilities.



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Table 1

HISTORICAL WATER CUSTOMERS, SALES, AND REVENUES

Year Ended December 31

City of Wichita, Kansas

Customer Classification	Customers		
	<u>2012</u>	<u>2013</u>	<u>2014</u>
Residential	128,073	127,715	129,296
Commercial/Industrial	10,790	11,205	11,140
Wholesale	11	12	12
Lawn Service	3,049	3,049	3,059
Fire Protection	1,876	1,897	1,941
Contract	362	355	357
Water Utility Uses	<u>29</u>	<u>28</u>	<u>28</u>
Total Customers	144,190	144,261	145,833

Water Sales - Million Gallons (1)			
Residential	10,637	8,097	8,539
Commercial/Industrial	6,979	6,171	6,447
Wholesale	1,700	1,547	1,577
Contract	453	192	307
Other Sales	39	24	29
Estimated Leaks	489	488	320
Water Utility Uses	296	322	264
Unaccounted for Water	<u>1,443</u>	<u>1,380</u>	<u>1,490</u>
Total Sales	22,036	18,221	18,973

Water Sales Revenues (1)			
Residential	\$ 48,073,496	\$ 38,674,358	\$ 44,050,733
Commercial/Industrial	25,523,718	19,235,480	23,175,487
Wholesale	4,098,308	3,731,828	4,156,196
Fire Protection	346,415	419,269	483,235
Contract	1,599,232	787,614	1,227,858
Backflow Charges	238,876	241,202	249,843
Other Sales	<u>376,962</u>	<u>323,897</u>	<u>406,871</u>
Total Sales Revenues	\$ 80,257,007	\$ 63,413,648	\$ 73,750,223

(1) Water and Sewer Utility revenue and sales volume data is based on actual billing information and excludes year-end accrual entries.



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Table 2

HISTORICAL SEWER CUSTOMERS AND REVENUES

Year Ended December 31

City of Wichita, Kansas

Customer Classification	Customers		
	<u>2012</u>	<u>2013</u>	<u>2014</u>
Residential	122,656	122,228	124,094
Commercial	11,073	10,971	11,172
Industrial	16	17	13
Institutional	735	725	731
Wholesale	1	1	1
Extra Strength	10	10	9
Total Customers	<u>134,491</u>	<u>133,952</u>	<u>136,020</u>

Sewer Sales Revenues (1)

Residential	\$ 25,470,226	\$ 28,158,960	\$ 28,274,286
Commercial	12,827,129	12,978,806	13,730,940
Industrial	4,073,295	4,542,044	4,728,940
Institutional	828,637	845,121	835,677
Wholesale	236,249	246,265	269,549
Extra Strength	1,607,617	2,132,156	1,891,883
Other	21,394	21,417	20,257
Total Sales Revenues	<u>\$ 45,064,547</u>	<u>\$ 48,924,769</u>	<u>\$ 49,751,532</u>

(1) Water and Sewer Utility revenue and sales volume data is based on actual billing information and excludes year-end accrual entries.

Projected water customers, sales, and sales revenues are presented in Table 3. Unaudited year-end financials were used for 2015 customers, sales and revenues. For the purpose of this study, customer counts were assumed to remain consistent with 2015 results through 2019. Water volume sales were forecasted to remain conservative at the lower 2015 demand rates. Projected water sales revenues for the Water Utility are \$73.4 million in 2015. Water sales revenues are projected to increase in 2016 due to an approved rate increase adjustment then remain stable over the remaining forecast period at approximately \$77.4 million.



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Table 3

PROJECTED WATER CUSTOMERS, SALES, AND REVENUES

Year Ended December 31

City of Wichita, Kansas

Customers					
Customer Classification	<u>2015 (1)</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Residential	130,106	130,106	130,106	130,106	130,106
Commercial/Industrial	11,158	11,158	11,158	11,158	11,158
Wholesale	11	11	11	11	11
Lawn Service	3,091	3,091	3,091	3,091	3,091
Fire Protection	1,967	1,967	1,967	1,967	1,967
Contract	356	356	356	356	356
Water Utility Uses	28	28	28	28	28
Total Customers	146,717	146,717	146,717	146,717	146,717

Water Sales - Million Gallons					
Residential	8,038	8,040	8,040	8,040	8,040
Commercial/Industrial	6,415	6,420	6,420	6,420	6,420
Wholesale	1,481	1,480	1,480	1,480	1,480
Contract	197	200	200	200	200
Estimated Leaks	1,034	1,030	1,030	1,030	1,030
Water Utility Uses	325	330	330	330	330
Unaccounted for Water	1,427	1,430	1,430	1,430	1,430
Total Sales	18,942	18,955	18,955	18,955	18,955

Water Sales Revenues					
Residential	\$ 43,025,719	\$ 45,446,500	\$ 45,446,500	\$ 45,446,500	\$ 45,446,500
Commercial/Industrial	23,913,689	25,272,500	25,272,500	25,272,500	25,272,500
Wholesale	4,217,753	4,450,900	4,450,900	4,450,900	4,450,900
Fire Protection	561,414	592,900	592,900	592,900	592,900
Contract	1,009,956	1,010,000	1,010,000	1,010,000	1,010,000
Backflow Charges	249,422	249,400	249,400	249,400	249,400
Other Sales	390,619	390,600	390,600	390,600	390,600
Total Sales Revenues	\$ 73,368,572	\$ 77,412,800	\$ 77,412,800	\$ 77,412,800	\$ 77,412,800

(1) Preliminary, unaudited numbers.



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Projected sewer customers sales revenues are presented in Table 4. Unaudited year-end financials were used for 2015 customers and revenues. For the purpose of this study, customer counts were assumed to remain consistent with 2015 results through 2019. Projected sewer sales revenues for the Sewer Utility are \$52.4 million in 2015. Sewer sales revenues are projected to increase in 2016 due to an approved rate increase adjustment then remain stable over the remaining forecast period at approximately \$55.0 million.

Table 4

PROJECTED SEWER CUSTOMERS AND REVENUES

Year Ended December 31
City of Wichita, Kansas

Customers					
Customer Classification	<u>2015</u> (1)	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Residential	125,091	125,091	125,091	125,091	125,091
Commercial	11,220	11,220	11,220	11,220	11,220
Industrial	16	16	16	16	16
Institutional	722	722	722	722	722
Wholesale	1	1	1	1	1
Extra Strength	9	9	9	9	9
Total Customers	137,059	137,059	137,059	137,059	137,059

Sewer Sales Revenues					
Residential	\$ 29,598,625	\$ 31,108,200	\$ 31,108,200	\$ 31,108,200	\$ 31,108,200
Commercial	14,286,884	15,015,500	15,015,500	15,015,500	15,015,500
Industrial	5,668,547	5,957,600	5,957,600	5,957,600	5,957,600
Institutional	847,285	890,500	890,500	890,500	890,500
Wholesale	295,155	310,200	310,200	310,200	310,200
Extra Strength	17,708	18,600	18,600	18,600	18,600
Other	1,660,630	1,660,600	1,660,600	1,660,600	1,660,600
Total Sales Revenues	\$ 52,374,834	\$ 54,961,200	\$ 54,961,200	\$ 54,961,200	\$ 54,961,200

(1) Preliminary, unaudited numbers.



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OPERATION AND MAINTENANCE EXPENSES

Annual operation and maintenance expenses of the Utility for the historical period from 2012 through 2014 are presented in Table 5. These expenses consist of personal services, contractual services, materials and supplies, other, and administrative charges. The total water operation and maintenance expenses for the Utility for the historical period were \$27.3 million in 2012, \$28.4 million in 2013, and \$29.2 million in 2014. The total sewer operation and maintenance expenses for the Utility for the historical period were \$20.3 million in 2012, \$21.0 million in 2013, and \$23.3 million in 2014.

Table 6 presents the unaudited year-end operation and maintenance expenses for 2015 and the projected operation and maintenance for the Utility for the period 2016 through 2019.

The 2016 and 2017 water operation and maintenance expenses are based on the adopted 2016 Budget and the approved 2017 Budget provided by the City. Operation and maintenance costs are projected to increase approximately 2.6 percent annually thereafter. Total water operation and maintenance expenses are expected to increase from approximately \$29.0 million in 2015 to approximately \$32.6 million in 2019.

The 2016 and 2017 sewer operation and maintenance expenses are based on the adopted 2016 Budget and the 2017 approved Budget provided by the City. Overall operation and maintenance costs are projected to increase approximately 2.6 percent annually thereafter. Total sewer operation and maintenance expenses are expected to increase from approximately \$22.3 million in 2015 to approximately \$25.9 million in 2019.

PROJECTED CASH FLOW

The projected Utility cash flow is shown in Table 7. User charge revenues forecasted for each utility are based on the unaudited financials for 2015 and projections shown previously on Tables 3 and 4. Other revenues include late payment penalties, account origination fees, and other miscellaneous charges. Investment earnings are not expected to be material due to the historically low yields experienced in recent years. Cash capital contributions are consistent with historical levels. Total revenues for 2016 through 2019 are projected to remain stable under current rates implemented in 2016.

Operation and maintenance expenses are projected to increase as shown in Table 6.

Debt service for existing and proposed revenue bond debt issues is also shown in Table 7. Debt service related to the proposed Series 2016A revenue bonds is based on debt service schedule provided by the City. Of the \$26,090,000 total par amount, \$4,150,000 is assumed to be a 15-year debt issuance, with the remaining \$21,940,000 being financed over 20 years.



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Table 5

HISTORICAL OPERATION AND MAINTENANCE EXPENSES

Year Ended December 31
City of Wichita, Kansas

Description	Water		
	<u>2012</u>	<u>2013</u>	<u>2014</u>
Personal Services	\$ 9,190,191	\$ 9,549,396	\$ 10,510,200
Contractual Services	11,581,018	12,646,777	12,320,970
Materials and Supplies	4,846,906	4,726,101	4,874,712
Other	554,363	761,172	791,528
Administrative Charges	1,095,996	738,797	684,319
Total O&M Expenses	\$ 27,268,474	\$ 28,422,243	\$ 29,181,729

Description	Sewer		
	<u>2012</u>	<u>2013</u>	<u>2014</u>
Personal Services	\$ 9,028,684	\$ 9,585,333	\$ 10,042,187
Contractual Services	7,200,267	7,269,935	8,306,471
Materials and Supplies	3,317,309	3,440,703	4,315,238
Other	468,170	459,994	345,114
Administrative Charges	290,213	279,057	304,520
Total O&M Expenses	\$ 20,304,643	\$ 21,035,022	\$ 23,313,530



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Table 6

PROJECTED OPERATION AND MAINTENANCE EXPENSES

Year Ended December 31

City of Wichita, Kansas

Description	Water				
	<u>2015 (1)</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Personal Services	\$ 10,971,183	\$ 11,001,800	\$ 11,254,400	\$ 11,547,000	\$ 11,847,200
Contractual Services	11,226,466	12,333,600	12,489,600	12,814,300	13,147,500
Materials and Supplies	5,229,102	5,528,900	5,600,000	5,745,600	5,895,000
Other	814,025	835,400	856,900	879,200	902,100
Administrative Charges	<u>741,288</u>	<u>741,300</u>	<u>741,300</u>	<u>760,600</u>	<u>780,400</u>
Total O&M Expenses	28,982,064	30,441,000	30,942,200	31,746,700	32,572,200

Description	Sewer				
	<u>2015 (1)</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Personal Services	\$ 10,605,444	\$ 11,377,700	\$ 11,651,400	\$ 11,954,300	\$ 12,265,100
Contractual Services	7,277,321	8,062,800	8,231,800	8,445,800	8,665,400
Materials and Supplies	3,630,563	4,010,300	4,010,300	4,114,600	4,221,600
Other	365,310	387,100	410,700	421,400	432,400
Administrative Charges	<u>388,084</u>	<u>338,100</u>	<u>338,100</u>	<u>346,900</u>	<u>355,900</u>
Total O&M Expenses	22,266,722	24,176,000	24,642,300	25,283,000	25,940,400

(1) Preliminary, unaudited numbers.



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Table 7

PROJECTED CASH FLOW
Year Ended December 31
City of Wichita, Kansas

Description	2015 (1)	2016	2017	2018	2019
Revenue from Water Sales	\$ 73,368,572	\$ 77,412,800	\$ 77,412,800	\$ 77,412,800	\$ 77,412,800
Revenue from Sewer Volumes	52,374,834	54,961,200	54,961,200	54,961,200	54,961,200
Other Revenues	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Investment Earnings (2)	-	-	-	-	-
Cash Capital Contributions (2)	5,214,928	5,214,900	5,214,900	5,214,900	5,214,900
Total Revenues	131,958,334	138,588,900	138,588,900	138,588,900	138,588,900
Operation and Maintenance Expenses	\$ 51,248,786	\$ 54,617,000	\$ 55,584,500	\$ 57,029,700	\$ 58,512,600
Outstanding Debt Service	39,627,300	43,243,400	40,192,000	40,263,300	36,452,500
Proposed Debt Service	-	-	1,790,133	1,789,814	1,791,914
Total Debt Service	39,627,300	43,243,400	41,982,133	42,053,114	38,244,414
Total Operating Expenses	90,876,086	97,860,400	97,566,633	99,082,814	96,757,014
Annual Operating Balance	\$ 41,082,248	\$ 40,728,500	\$ 41,022,267	\$ 39,506,086	\$ 41,831,886
<u>Debt Service Coverage</u>					
Net Operating Revenues Available for Debt Service (3)	\$ 80,709,548	\$ 83,971,900	\$ 83,004,400	\$ 81,559,200	\$ 80,076,300
Annual Debt Service	\$ 39,627,300	\$ 43,243,400	\$ 41,982,133	\$ 42,053,114	\$ 38,244,414
Debt Service Coverage Based on Net Operating Revenues	2.04	1.94	1.98	1.94	2.09
<u>Coverage including G.O. Indebtedness</u>					
Net Operating Revenues Available for Debt Service (3)	\$ 80,709,548	\$ 83,971,900	\$ 83,004,400	\$ 81,559,200	\$ 80,076,300
Revenue and G.O. Debt Service (4)	\$ 52,053,200	\$ 52,894,800	\$ 51,630,833	\$ 51,692,814	\$ 47,878,314
Coverage Based on Net Operating Revenues	1.55	1.59	1.61	1.58	1.67
<u>Coverage including City Payment</u>					
Net Operating Revenues Available for Debt Service (3)	\$ 80,709,548	\$ 83,971,900	\$ 83,004,400	\$ 81,559,200	\$ 80,076,300
Total Debt Service and Payment to the City (5)	\$ 63,256,131	\$ 65,581,306	\$ 64,848,402	\$ 64,350,314	\$ 60,656,514
Coverage Based on Net Operating Revenues	1.28	1.28	1.28	1.27	1.32

(1) Preliminary, unaudited numbers.

(2) Based on unaudited 2015 levels of Investment Earnings and Cash Capital Contributions.

(3) Reflects Total Revenues less Operation and Maintenance Expenses.

(4) Reflects Annual Debt Service plus G.O. Debt Service

(5) Reflects Annual Debt Service plus G.O. Debt Service plus Payment to the City



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The Annual Operating Balance in Table 7 above reflects Total Revenues less Total Operating Expenses. Additionally, Table 7 shows the Annual Operating Balance is projected to range from a low of approximately \$39.5 million in 2018 to a high of approximately \$41.8 million in 2019. A positive Annual Operating Balance indicates operating expenses and debt service payments are projected to be fully funded throughout the study period.

On an annual basis, debt service coverage based on net operating revenues is anticipated to range from 1.94 to 2.09 throughout the forecast period, in excess of the minimum annual target of 1.20. Results in Table 7 do not include funding requirements for projects beyond those funded by the proposed Series 2016A revenue bonds. The Utility has indicated future recommended Utility revenue increases for 2017 to 2024 are anticipated to range from approximately 3.0 to 6.0 percent annually. The City has demonstrated a willingness to implement rate adjustments necessary to meet its obligations and sustain the financial and operational integrity of the system.

In accordance with rate covenants, the City is also required to achieve a coverage ratio of at least 1.00 with respect to General Obligation (G.O.) Indebtedness and the Payment to the City. As shown in Table 7, projected coverage of the G.O. Indebtedness exceeds the minimum annual target, ranging from 1.55 to 1.67 during the forecast period. The Payment to the City also exceeds the minimum annual target, ranging from 1.27 to 1.32 during the forecast period.

ADDITIONAL BOND COVERAGE REQUIREMENT

The City may issue additional parity lien bonds for the Utility to finance extensions, enlargements and improvements only if and when the debt service coverage calculation as described in the Bond Ordinance (see excerpt below) equals or exceeds 120 percent:

“...the Debt Service Coverage Ratio for the two (2) Fiscal Years immediately preceding the issuance of such Utility Indebtedness, as reflected by information provided by the Independent Accountant, shall be not less than 1.20, including the Utility Indebtedness proposed to be issued. In the event that the Issuer has instituted any increase in rates for the use and services of the Utility and such increase shall not have been in effect during the full two (2) Fiscal Years immediately preceding the issuance of such proposed Utility Indebtedness, the additional Net Revenues Available for Debt Service which would have resulted from the operation of the Utility during said two (2) preceding Fiscal Years had such rate increase been in effect for the entire period may be added to the stated Net Revenues for the calculation of the Debt Service Coverage Ratio, provided that such estimated additional Net Revenues shall be determined by a Consultant.”



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The Debt Service Coverage Ratio is defined as:

“For any Fiscal Year: (a) with respect to the rate covenants, the ratio determined by dividing (i) a numerator equal to the Net Revenues Available for Debt Service for such Fiscal Year by (ii) a denominator equal the Debt Service Requirements for such Fiscal Year; and (b) with respect to Additional Indebtedness, the ratio determined by dividing (i) a numerator equal to the average Net Revenues Available for Debt Service for the two (2) prior Fiscal Years by (ii) a denominator equal to the Maximum Annual Debt Service; provided that with respect to Additional Indebtedness that are proposed to be Parity Indebtedness, Debt Service Requirements on Subordinate Lien Obligations and General Obligation Indebtedness shall be disregarded.”

COVERAGE

Burns & McDonnell, acting as the consulting engineer, has completed an analysis of the debt service coverage. Based on our analysis, Burns & McDonnell believes the coverage covenant described above is fully met. The calculated coverage has been developed pursuant to the bond ordinance and is provided in summary in Table 8 and in additional detail in Table 9 of this Report.

The amounts shown for revenue and expenses are based on the average of actual 2013 and 2014 amounts for the water and sewer system. Revenues have been adjusted to reflect rate increases put in to place in subsequent periods. The Utility implemented an increase of 6.0 percent to water and an increase of 5.0 percent to sewer, which took effect on January 1, 2014. On January 1, 2015, the Utility implemented a rate increase of 6.0 percent for water and 5.0 percent for sewer. On January 1, 2016, the Utility implemented rate increases of 5.6 percent for water and 5.1 percent for sewer.

The water and sewer service revenues for 2013 and 2014, as shown in Table 9 and in more detail in Table 10, reflect the impact of revenue increases implemented in 2014, 2015 and 2016. These adjusted revenues were used to calculate debt coverage.

Table 11 shows annual debt service for existing Utility bonds and the debt service for the proposed Bonds. The determination of maximum annual debt service of \$43,243,368 occurs in 2016.



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Table 8

ADDITIONAL BONDS TEST CALCULATION

Year Ended December 31

City of Wichita, Kansas

Description	Utility 2-Year <u>Average</u>
<u>Revenues</u>	
Water Sales	\$ 80,204,683
Sewer Charges for Service	56,978,207
Investment Earnings	-
Capital Contributions	4,974,522
Bond Premium Amortization	1,834,080
Other	342,144
Total Revenues	\$ 144,333,636
<u>Operation and Maintenance Expenses</u>	
Personal Services	\$ 19,843,558
Contractual Services	20,272,077
Materials and Supplies	8,678,377
Other	1,178,904
Administrative Charges	1,003,347
Total Operation and Maintenance Expenses	\$ 50,976,263
Net Revenue Available for Debt Service	\$ 93,357,373
Maximum Annual Debt Service	\$ 43,243,368 (1)
Calculated Coverage	216%
"Additional Bonds" Required Coverage	120%

(1) As provided by the City, see Table 11 for additional information.



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Table 9

ADDITIONAL BONDS: DETERMINATION OF 2-YEAR AVERAGE RESULTS

Year Ended December 31
City of Wichita, Kansas

Description	Water 2013 (1)	Water 2014 (2)	Sewer 2013 (1)	Sewer 2014 (2)	Utility 2-Year Average
Revenues					
Water Service Revenues (3)	\$ 76,512,066	\$ 83,897,299			\$ 80,204,683
Sewer Service Revenues (3)			\$ 57,516,020	\$ 56,440,394	56,978,207
Investment Earnings	-	-	-	-	-
Capital Contributions- Cash	3,348,811	3,946,114	1,452,999	1,201,120	4,974,522
Bond Premium Amortization	859,176	1,074,943	847,116	886,925	1,834,080
Other	357,794	282,256	20,503	23,735	342,144
Total Revenues	\$ 81,077,847	\$ 89,200,612	\$ 59,836,638	\$ 58,552,174	\$ 144,333,636
Operation and Maintenance Expenses					
Personal Services	\$ 9,549,396	\$ 10,510,200	\$ 9,585,333	\$ 10,042,187	\$ 19,843,558
Contractual Services	12,646,777	12,320,970	7,269,935	8,306,471	20,272,077
Materials and Supplies	4,726,101	4,874,712	3,440,703	4,315,238	8,678,377
Other	761,172	791,528	459,994	345,114	1,178,904
Administrative Charges	738,797	684,319	279,057	304,520	1,003,347
Total Operation and Maintenance Expenses	\$ 28,422,243	\$ 29,181,729	\$ 21,035,022	\$ 23,313,530	\$ 50,976,263
Net Revenue Available for Coverage	\$ 52,655,604	\$ 60,018,883	\$ 38,801,616	\$ 35,238,644	\$ 93,357,373
Maximum Annual Revenue Bond Debt Service					\$ 43,243,368 (4)
Calculated Coverage for the Additional Bonds Test					216%
Coverage Needed to Meet Additional Bonds Test					120%

(1) Source: 2013 Comprehensive Annual Financial Report.

(2) Source: 2014 Comprehensive Annual Financial Report.

(3) Revenues are adjusted to reflect appropriate rate and customer charge adjustments, see Table 10.

(4) Determination of Maximum Annual Debt Service presented in Table 11.



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Table 10

REVENUE ADJUSTMENT DETERMINATION

Year Ended December 31
City of Wichita, Kansas

Description	<u>2013</u>	<u>2014</u>
Total Water Sales Revenues	\$ 63,413,648	\$ 73,750,223
Year End Accruals and Auditor's Adjustments	<u>1,375,818</u>	<u>1,422,676</u>
Total Water Sales Revenues	64,789,466	75,172,899
Other Adjustments		
January 1, 2014 Rate Increase Adjustment (6%)	3,770,900	-
January 1, 2015 Rate Increase Adjustment (6%)	3,997,200	4,385,600
January 1, 2016 Rate Increase Adjustment (5.6%)	3,954,500	4,338,800
Total Adjusted Water Sales Revenues	\$ 76,512,066	\$ 83,897,299
Total Sewer Sales Revenues	\$ 48,924,769	\$ 49,751,532
Year End Accruals and Auditor's Adjustments	<u>828,951</u>	<u>1,539,162</u>
Total Sewer Sales Revenues	49,753,720	51,290,694
Other Adjustments		
January 1, 2014 Rate Increase Adjustment (5%)	2,445,200	-
January 1, 2015 Rate Increase Adjustment (5%)	2,567,400	2,486,600
January 1, 2016 Rate Increase Adjustment (5.1%)	<u>2,749,700</u>	<u>2,663,100</u>
Total Adjusted Sewer Sales Revenues	\$ 57,516,020	\$ 56,440,394
Total Combined Adjusted Sales Revenue	\$ 134,028,086	\$ 140,337,693



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Table 11

MAXIMUM ANNUAL DEBT SERVICE
City of Wichita, Kansas

	Existing Water & Sewer Debt Service Payments (1)	Series 2016A Water and Sewer Debt Service Payments (2)	TOTAL Water & Sewer Debt Service Payments
2015	\$ 39,627,341	\$ -	\$ 39,627,341
2016	43,243,368	-	43,243,368
2017	40,191,975	1,790,133	41,982,108
2018	40,263,253	1,789,814	42,053,067
2019	36,452,506	1,791,914	38,244,420
2020	35,827,065	1,788,514	37,615,579
2021	35,715,015	1,789,714	37,504,729
2022	35,097,403	1,790,414	36,887,817
2023	35,018,963	1,790,614	36,809,577
2024	29,464,110	1,788,733	31,252,843
2025	29,519,244	1,784,708	31,303,952
2026	27,748,473	1,781,833	29,530,306
2027	26,443,723	1,788,208	28,231,931
2028	26,360,999	1,789,276	28,150,274
2029	21,352,083	1,793,776	23,145,858
2030	21,275,044	1,785,816	23,060,859
2031	14,900,791	1,784,841	16,685,632
2032	12,582,946	1,450,471	14,033,417
2033	9,522,118	1,453,274	10,975,391
2034	9,403,783	1,452,957	10,856,740
2035	3,712,938	1,450,721	5,163,659
2036	2,598,000	1,456,526	4,054,526
2037	2,489,750	-	2,489,750
2038	2,381,500	-	2,381,500
2039	2,273,250	-	2,273,250
Maximum Annual Debt Service			<u>\$ 43,243,368</u>

(1) Debt service information provided by City.

(2) 2016A debt service based on the debt service schedule
provided by the City.



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OPINIONS

As a result of our investigations and analysis of the Utility's records, the reviews, studies, and analyses we have discussed in this Report, and based upon our continuing studies of the Utility operations, it is Burns & McDonnell's opinion that:

1. The Utility properties are and have been maintained, preserved, and kept in good working order and condition, and the City makes, as necessary, proper repairs, replacements, and renewals.
2. The assumptions used in preparing the additional bonds test calculation are reasonable. The debt service coverage covenant is fully met.
3. Based on the analysis included herein, the Utility can meet its existing debt service obligations including the obligations for the Series 2016A Bonds.

BURNS & McDONNELL QUALIFICATIONS

Burns & McDonnell has specialized in providing engineering, operations, and financial consulting services to water, wastewater, electric, and gas utilities throughout our history of over 100 years. With over 5,000 employee-owners, consisting of specialists from all engineering disciplines and business functions, Burns & McDonnell offers a comprehensive package of experience and skills for performing rate and financial analyses, feasibility studies, and negotiation services. In addition, the firm has extensive experience in assisting utilities with the issuance of debt and with management and financial aspects of their operations.

Sincerely,

BURNS & McDONNELL

A handwritten signature in dark ink, reading "David F. Naumann" followed by a horizontal line.

David F. Naumann
Project Manager, Business & Technology Services

A handwritten signature in dark ink, reading "Sara K. Stafford" in a cursive style.

Sara K. Stafford
Senior Analyst, Business & Technology Services

DFN/SKS